

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
ON APPEAL FROM THE EXAMINER TO THE BOARD
OF PATENT APPEALS AND INTERFERENCES**

In re Application of: Richard Harvey et al.
Serial No.: 10/648,140
Filing Date: August 25, 2003
Group Art Unit: 2164
Examiner: Alicia M. Lewis
Confirmation No.: 3247
Title: WEB SERVICES APPARATUS AND METHODS

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

REPLY BRIEF

Pursuant to 37 C.F.R. § 1.193, Appellants respectfully file this Reply Brief in response to the Examiner's Answer dated June 11, 2009.

ARGUMENTS

Appellants filed an Appeal Brief on December 3, 2008, explaining clearly and in detail why Claims 1-17 are allowable over the prior art cited by the Examiner in the Final Office Action mailed May 15, 2008. Specifically, Appellants demonstrated that at least independent Claims 1, 7, and 13 are allowable over the proposed *Shiman-Gadbois* combination. Additionally, Appellants demonstrated that at least dependent Claims 2, 6, 8, 12, and 14 are allowable over the proposed *Shiman-Gadbois* combination. For the reasons discussed below, Appellant respectfully submits that these rejections continue to be improper and should be reversed by the Board.

I. Claims 1, 3-5, 7, 9-11, 13, and 15-17 are allowable over the proposed *Shiman-Gadbois* combination at least because the cited references do not disclose, teach, or suggest “defining attributes of a specific type which correspond to a specific object class, each attribute unique to the specific object class to which the attribute belongs”

In the *Appeal Brief*, Appellants demonstrated that the proposed *Shiman-Gadbois* combination is deficient with respect to Appellants’ claims at least because cited references do not disclose, teach, or suggest “defining **attributes of a specific type** which correspond to a specific object class, **each attribute unique to the specific object class to which the attribute belong**,” as recited in Appellants’ Claim 1. (*Appeal Brief*, pages 16-17). Appellants have reviewed the Examiner’s remarks in the *Examiner’s Answer*. However, it continues to be Appellants position that *Shiman*, as relied upon by the Examiner, is deficient with respect to the recited claim elements.

Specifically, and as demonstrated in the *Appeal Brief*, *Shiman* merely discloses that an object class includes certain attributes and that the collection of these attribute values may be used to uniquely identify the object. (*Appeal Brief*, page 16). In the *Examiner’s Answer*, the Examiner states that “there are no limitations in the claims that require only one object class to include certain attributes.” (*Examiner’s Answer*, page 7). Appellants disagree. Appellants’ claims clearly state that “attributes of a specific type [] correspond to a specific object class” and then further require that “each attribute [is] unique to the specific object class to which the attribute belongs.” Accordingly, Appellants’ claim requires that an object

class include attributes of a specific type and further require that an attribute is unique to the specific object class. The very fact that an attribute of a specific type is “unique” to an object class, necessarily requires that only one object class include an attribute of a specific type. Because *Shiman* merely discloses that an object class includes certain attributes and does not specify that an attribute type is unique to an object class, it continues to be Appellants’ position that the *Shiman-Gadbois* combination does not disclose, teach, or suggest “each attribute unique to the specific object class to which the attribute belongs,” as recited in Appellants’ Claim 1.

Like the *Advisory Action*, the *Examiner’s Answer* points to the primary key attribute as being specific and unique to a specific object class. (*Examiner’s Answer*, page 7, lines 1-4). Specifically, the Examiner states:

Every object belongs to an object class, and thus the chosen primary key attribute represents an unique, defined attribute for a particular object class. The value of the primary key attribute relates to a particular object, and not the actual primary key attribute. For example, an employee object class may have social security number as its primary key attribute. An object of the object class, such as John, would, have a specific primary key attribute value such as SSN of 123-45-6789. Thus, contrary to Applicants’ argument, the primary key attribute is unique to the object class, and the value of the primary key attribute is specific to the object.

(*Examiner’s Answer*, page 7, lines 14-20). Portions of this statement seem correct. For example, Appellants do not necessarily disagree with the statement that “the value of the primary key attribute is specific to the object.” However, Appellants’ must disagree with the Examiner’s conclusion that because the value of the primary key attribute uniquely identifies a specific object it necessarily follows that “the primary key attribute is unique to the object class.”

Appellants’ respectfully note that *Shiman* discloses that “[e]very object can be indexed by the value of its primary key attribute, a unique name for the object.” (*Shiman*, page 1, paragraph 9, emphasis added). However, an attribute value (primary or not) is not the same as the attribute type. Likewise, an object is not the same as an object class. Accordingly, the disclosure that the value of the primary key attribute is unique to an object does not amount to disclosing that an attribute type is unique to an object class, as required by Appellants’ claim. Consider again the Examiner’s example (which Appellants’ respectfully note is the Examiner’s and not actually discussed in *Shiman*):

[A]n employee object class may have social security number as its primary key attribute. An object of the object class, such as John, would have a specific primary key attribute value such as a SSN of 123-45-6789.

Because *Shiman* only discloses that “[e]very object can be indexed by the value of its primary key attribute, a unique name for the object,” one can only surmise that the given SSN uniquely identifies John within the employee object class. However, Applicants claim language recites “object classes” (and thus, more than one object class) and further recites “defining **attributes of a specific type** which correspond to a specific object class, **each attribute unique to the specific object class to which the attribute belong**.” Returning to the Examiner’s example, it does not necessarily follow that an object class other than the employee object class does not also include the social security number attribute. For example, Appellants would further submit that it would be equally plausible in the described situation that another object class, such as “non employee,” might also have the attribute “SSN” assigned to the object class. Thus, while John’s specific SSN (i.e., primary key attribute) uniquely identifies John (i.e., the object) within the employee object class, it does not follow that the SSN, as the attribute type, is unique to the object class. Accordingly, it continues to be Appellants’ position that the proposed *Shiman-Gadbois* combination does not disclose, teach, or suggest “defining **attributes of a specific type** which correspond to a specific object class, **each attribute unique to the specific object class to which the attribute belong**,” as recited in independent Claim 1 and analogously recited in independent Claims 7 and 13.

For at least these reasons, Appellants respectfully submit that the rejection of Claims 1, 3-5, 7, 9-11, 13, and 15-17 over the proposed *Shiman-Gadbois* combination is improper.

II. Claims 2, 8, and 14 are allowable over the proposed *Shiman-Gadbois* combination at least because the cited references do not disclose, teach, or suggest “the object classes are a subclass of an abstract object class”

In the *Appeal Brief*, Appellants demonstrated that the proposed *Shiman-Gadbois* combination is deficient with respect to Appellants’ claims at least because cited references do not disclose, teach, or suggest “the object classes are a subclass of an abstract object class,” as recited in Claims 2, 8, and 14. (*Appeal Brief*, pages 19-20). Appellants have reviewed the Examiner’s remarks in the *Examiner’s Answer*. However, it continues to be

Appellants position that *Shiman*, as relied upon by the Examiner, is deficient with respect to the recited claim elements.

Specifically, and as demonstrated in the *Appeal Brief*, *Shiman* merely discloses:

Attributes are characteristics of a database "object class." An object class defines a type of object comprised of certain attributes. Classes are abstract, specifying a type of object that may be created. Objects are discrete manifestations of object classes. In general, objects are metaphors for tangible entities, such as people and documents; these objects are defined by the values of their attributes in their abstract object class . . .

(*Shiman*, page 1, paragraph 9). Thus, *Shiman* merely discloses that classes of objects "are abstract" and, thus, specify "a type of object that may be created." (*Shiman*, page 1, paragraph 9). Accordingly, "abstract" as used in *Shiman* merely indicates that an object class includes a specific type of objects. There is no disclosure in *Shiman* that any of such object classes include an object sub-class. In fact, there is no disclosure at all of sub-classes. While *Gadbois* may disclose a directory tree (*Examiner's Answer*, page 10, citing *Gadbois*, Figure 2), there is no disclosure that any object within the directory tree comprises an "abstract object class." Accordingly, the proposed *Shiman-Gadbois* combination as relied upon by the Examiner does not disclose, teach, or suggest that "the object classes are a subclass of an abstract object class," as recited in Claims 2, 8, and 14.

For at least these reasons, Appellants respectfully submit that the rejection of Claims 2, 8, and 14 over the proposed *Shiman-Gadbois* combination is improper.

III. Claims 6 and 12 are Allowable over the Proposed *Shiman-Gadbois* Combination at least because the cited references do not disclose, teach, or suggest "providing specific attributes which relate to one object class for a purpose of enhancing searching"

In the *Appeal Brief*, Appellants demonstrated that the proposed *Shiman-Gadbois* combination is deficient with respect to Appellants' claims at least because cited references do not disclose, teach, or suggest "providing specific attributes which relate to one object class for a purpose of enhancing searching," as recited in Claims 6 and 12. (*Appeal Brief*, pages 22-23). Appellants have reviewed the Examiner's remarks in the *Examiner's Answer*.

However, it continues to be Appellants position that *Shiman*, as relied upon by the Examiner, is deficient with respect to the recited claim elements.

Specifically, and as demonstrated in the *Appeal Brief*, *Shiman* merely discloses that an object class includes certain attributes and that the collection of these attribute values may be used to uniquely identify the object. (*Appeal Brief*, pages 16 and 22). In the *Examiner's Answer*, the Examiner states that "Claims 6 and 12 do not recite that specific attributes relate to only one object class, but instead recites tat the attributes relate to one object class." (*Examiner's Answer*, page 11). Appellants disagree. Claims 6 and 12 depend from Claims 1 and 7, respectively, and incorporate the limitations thereof. Thus, Appellants' claims clearly require that "attributes of a specific type [] correspond to a specific object class" and then further require that "each attribute [is] unique to the specific object class to which the attribute belongs." Finally, Claims 6 and 12 further require that "specific attributes . . . relate to one object class." Accordingly, Appellants' claim requires that an attribute is unique to the specific object class and relates to one object class. The very fact that an attribute of a specific type is "unique" to an object class, necessarily requires that only one object class include an attribute of a specific type. Because *Shiman* merely discloses that an object class includes certain attributes and does not specify that an attribute type is unique to an object class, it continues to be Appellants' position that the *Shiman-Gadbois* combination does not disclose, teach, or suggest "providing specific attributes which relate to one object class for a purpose of enhancing searching," as recited in Appellants' Claims 6 and 12.

Again, the *Examiner's Answer* points to the primary key attribute as "uniquely identify[ing] the object class to which it belongs." (*Examiner's Answer*, page 11, lines 3-5). Again, Appellants' must disagree. As discussed above with regard to Claim 1, *Shiman* only discloses that "[e]very object can be indexed by the value of its primary key attribute, a unique name for the object." (*Shiman*, page 1, paragraph 9, emphasis added). However, an attribute value (primary or not) is not the same as the attribute type. Likewise, an object is not the same as an object class. Accordingly, the disclosure that the value of the primary key attribute is unique to an object does not amount to disclosing that an attribute type is unique to an object class and relates to one object class, as required by Appellants' claim. As such, for these reasons and all the reasons discussed above with regard to Claim 1, it continues to be Appellants' position that the proposed *Shiman-Gadbois* combination does not disclose, teach,

or suggest "providing specific attributes which relate to one object class for a purpose of enhancing searching," as recited in Claims 6 and 12.

For at least these reasons, Appellants respectfully submit that the rejection of Claims 6 and 12 over the proposed *Shiman-Gadbois* combination is improper.

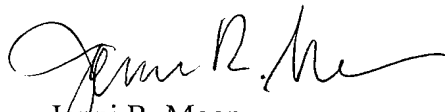
CONCLUSION

Appellants have demonstrated that the present invention, as claimed, is clearly distinguishable over the prior art cited by the Examiner. Therefore, Appellants respectfully request the Board to reverse the final rejections and instruct the Examiner to issue a Notice of Allowance with respect to all pending claims.

No fees are believed due; however, the Commissioner is authorized to charge any additional fees or credits to Deposit Account No. 02-0384 of Baker Botts, L.L.P.

Respectfully submitted,

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